

TMDLs 101

Regional Water Quality Control Board Colorado River Basin

Topics

- Water quality law/regulation
- TMDLs and TMDL process
- Impacts on restoration efforts
- Other projects

Salton Sea Watershed



Water Quality Control Law

	CWA	Porter-Cologne
Adoption of Basin Plans	X	X
Designate Beneficial Uses	Х	X
Establish WQOs/Policies	X	X
Establish Implementation Plan		X

Water Quality Standards

Beneficial use of the waterbody

Criteria for protection of uses

Policies to protect water quality

Water Quality Objectives

- Numeric
 - "1 ppb for Selenium"
 - "5 mg/l minimum dissolved oxygen"
- Narrative
 - "no toxics in toxic amounts"
 - "no sediment in amounts that affect uses"

Beneficial Uses of Water

- Ag supply
- Aquaculture
- Cold Freshwater Habitat
- FreshwaterReplenishment
- Groundwater Recharge
- Industrial Supply
- Municipal/Domestic Supply

- Hydropower Generation
- Preservation of Rare, Threatened, Endangered Species
- Water Contact Rec.
- Non-Contact Rec.
- Warm Freshwater Habitat
- Wildlife Habitat

Salton Sea Beneficial Uses*

- Aquaculture
- Warm water ecosystem
 - Vegetation, fish, wildlife, invertebrates
- Wildlife habitat
- Water contact recreation
- Non-contact water recreation
- Preservation of rare, threatened, endangered species





^{*} Water Quality Control Plan for the Colorado River Basin, CRWQCB-R7. (Salton Sea was designated as a sump for agricultural drainage in 1924)

Beneficial Uses* (cont.)

	New River	Alamo River	IV Drains	CVSWC
Wildlife Habitat			_	_
Warm water ecosystem			_	
Recreation (I, II)				
Rare, threatened, endangered species	_	_	-	_
Fresh water replenishment			_	_
Hydropower generation		P**		
Industrial supply	P**			

^{*} Water Quality Control Plan for the Colorado River Basin, CRWQCB-R7

^{**} Potential use

CWA 303(d) Requirements

- State
 - Identify impaired waters
 - Prioritize impaired waters
 - Develop TMDLs for impaired waters
- USEPA
 - Must act if State fails to act

What is a TMDL?

- A written water quality improvement plan that contains:
 - a measurable target to reach attainment
 - a description of the actions to be taken to remove the impairment;
 - an allocation of responsibility to act.

TMDL



Allowable Pollution from point sources



Allowable Pollution from nonpoint sources



Pollution from Natural Sources (wind, runoff, etc.) + MOS

Margin of Safety (uncertainty)

"Pollution budget" plan

TMDL Components

- What's the water quality problem?
- What's causing the problem?
- What standard addresses the problem?
- What's the allowable pollutant load under the standard?
- What is the link between the standard and loads?
- What measures are to be implemented to meet TMDL?

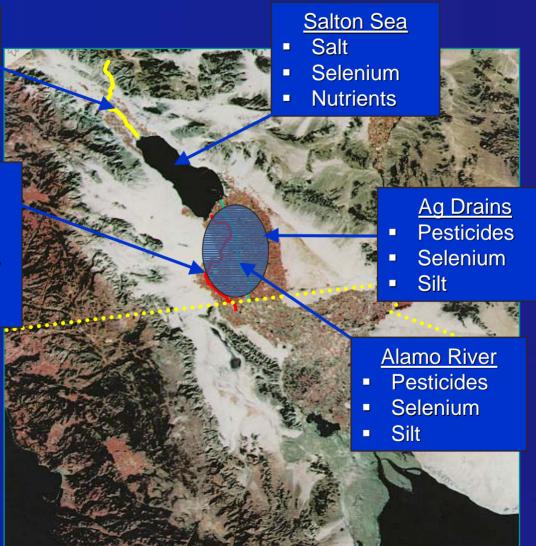
Watershed CWA 303(d) Pollutants



Pathogens

New River

- Pesticides
- Silt
- Pathogens
- Nutrients
- VOCs



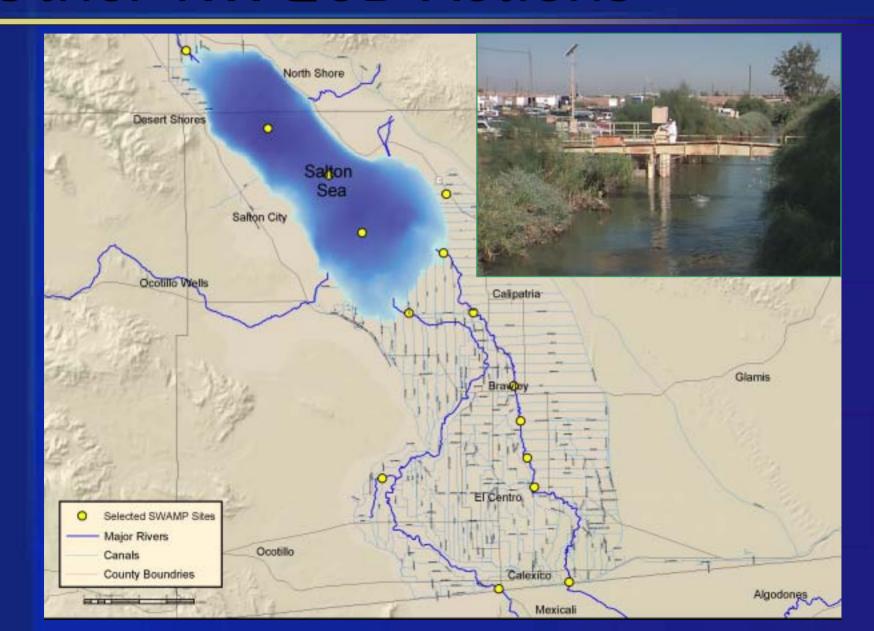
Approved TMDLs

TMDL	Status
New River Pathogen	 US Facilities in compliance
	Wastes from Mexico big problem
New & Alamo Rivers Silt	 Target silt & insoluble pesticides
	Valley-wide implementation
	Farmers well on track
	~ 85% voluntary compliance rate

TMDLs in the Pipeline

TMDL	Status
IV Drains Silt	Scheduled for 5/2004 Board hearing
New River Trash	Scheduled for 9/2004 Board hearing
New River VOCs	Will begin drafting in 10/2004
New River Dissolved Oxygen	Scheduled for 5/2005 Board hearing
Salton Sea Nutrients	Scheduled for 3/2006 Board hearing
	Formed Advisory Committee
	Focuses of phosphorous loading
CVSWC Pathogen	Scheduled for 6/2006 Board hearing

Other RWQCB Actions



Outreach and Education



California Regional Water Quality Control Board

New River
Pollution
in Mexico



Depender 198





Media Coverage







For more information

www.swrcb.ca.gov/rwqcb7/

Sheila Ault (760) 776-8960 aults@rb7.swrcb.ca.gov